## PROCEEDINGS

OF THE

## BIOLOGICAL SOCIETY OF WASHINGTON

## A NEW TOBACCO THRIPS.

BY W. E. HINDS.

During 1904 frequent complaints were received by the Bureau of Entomology of a thrips doing damage to shade-grown tobacco in Florida, producing an injury termed "white vein." As the tobacco is being grown in order to obtain the highest grade of wrapper leaf, the injury produces a considerable decrease in the value of the product.

About eighteen years ago Lindeman described a species of thrips which was doing great damage to tobacco grown in Bessarabia, giving it the name *Thrips tabaci*. This species has since been found scattered over Europe, England, and the United States, but, peculiar as it may seem, there is no recoord of its having attacked tobacco in this country, though the list of its food plants is large. Thus, the "tobacco thrips" of Lindeman has come to be generally known as the "onion thrips" in the United States. No confusion will arise in this country, therefore, if we apply the common name "tobacco thrips" to the new species here described.

The specimens from which this description has been made were collected and forwarded by Mr. W. A. Hooker, who has been studying the problem of controlling this pest.

## Euthrips nicotianæ sp. nov.

Average length, 1.05 mm. (0.95 to 1.13 mm.); average breadth at middle of abdomen, 0.27 mm. (0.225 to 0.285 mm.). General color of head and thorax light brown or tawny yellow-brown; abdomen dark brown.

Head about one and one-half times as wide as long, frequently slightly retracted under anterior margin of prothorax; occiput transversely wrinkled, posterior margin strongly thickened and darker in color; anterior margin slightly bisinuate; cheeks approximately straight and parallel. Eves dark red in color, not protruding, occupying together fully one-half the width of the front of the head and being one-half as long as the head; margins around eyes pale yellow in color; surface of eyes finely facetted and slightly pilose; three ocelli present, well separated, posterior ones contiguous with vellow borders to eyes, pale vellow in color and margined inwardly with pale orange crescents; one moderately stout, dark spine in front of each posterior ocellus; postocular spines weak and inconspicuous. Mouth cone reaching nearly to posterior edge of the prosternum, tapering abruptly; maxillary palpi slender, three segmented. Antennæ inserted slightly below front margin, approximate at base, about two and one-half times as long as the head and approximately equal to breadth of mesothorax; relative length of segments: \*

1	2	3	4	5	6	7	8
		-	-	-		-	-
6.2	11.4	13.5	13.6	12.2	16.2	3.0	4.5

Segment 1 is rounded, three-fourths as long as broad; 2 is as broad as 1; following segments about three-fourths as thick; segments 3 to 6 are constricted at bases, becoming more stout successively. Color of segments 1 and 2 uniform light brown; 3 to 5 pale yellow at bases, shading to brown at outer ends, each succeeding segment from 3 to 6 becoming darker in color; 6 to 8 are dark brown. Spines upon segments 2 to 5 are of medium size, but not very conspicuous. Color of head varying from gray-brown to yellow-brown.

Prothorax about five-ninths as long as broad and slightly longer than the head; sides rounded, slightly wider at hind than at fore angles; one stout spine at each anterior, and two stouter spines of equal size at each posterior angle; anterior marginal pair of spines about one-half as long as those at front angles; usual row of five spines on each side of hind margin, of which number four is equal in strength to those on the front margin. Mesothorax nearly one and one-third times as wide as the prothorax, broadest posteriorly, sides curving outward; mesonotum without conspicuous spines, posterior margin forming an obtuse angle in middle. Metathorax slightly narrower than mesothorax, sides nearly parallel, broader than prothorax at posterior edge; metanotum bears two pairs of spines at front edge, the inner pair being as strong as those at front angles of prothorax. Wings present (probably reduced at some season of year), average length about 0.68 mm., not reaching to the tip of the abdomen, breadth

<sup>\*</sup>The number of the segment is given above the line and below it the number of spaces covered upon an eye-piece micrometer by an average of the segments of 10 antennæ.

equal to about one-thirteenth of their length; fore wing has two longitudinal veins, each bearing stout spines set at regular intervals; fore wings shaded ash-gray, hind wings gray only along basal three-fourths of midvein; spines on wing veins dark brown and conspicuous; costa bears 19 to 24 spines; fore vein, 13 to 18; hind vein, 10 to 12; scale, 5; interior of scale, 1; fringe of hairs on costa of fore wing quite heavy, in length exceeding the breadth of the wing. Legs of medium length, lighter than body in color, pale yellow, shaded more or less with brown on upper side at middle of femora and tibiæ; a pair of stout brown spines at inside of tip of each tibia, small brown spines scattered along femora and tibiæ; spines standing in two rows on inner side of hind tibiæ are weak and only about four in each row.

Abdomen nearly cylindrical to eighth segment, then tapering abruptly to an acute tip; color uniformly dark brown; a still darker-colored narrow chitinous thickening extends across dorsal side of segments 2 to 8 near anterior edge. Three or four quite stout and rather conspicuous dark brown spines stand at each side of dorsal plates on 2 to 8; six rather prominent spines stand in a row on posterior edge of ventral plates 2 to 7; terminal spines stout and prominent; tenth segment split open along dorsal median line.

Described from 10 females.

Male specimens of this species have not been found.

Three cotypes (three slides) deposited in the U.S. National Museum. Type No. 8434, U.S. N. M. Three cotypes (three slides) deposited at the Massachusetts Agricultural College. Four cotypes (two slides) retained.

Habitat.—Quincy, Fla.

Food plants.—Tobacco, oats, shepherd's purse, Brassica sp.